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(54) **CHEMOCHROMIC DETECTOR FOR
SENSING GAS LEAKAGE AND PROCESS
FOR PRODUCING THE SAME**

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73/31.05

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See application file for complete search history.

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(57) **ABSTRACT**

A chemochromic sensor for detecting a combustible gas, such as hydrogen, includes a chemochromic pigment mechanically mixed with a polymer and formed into a rigid or pliable material. In a preferred embodiment, the chemochromic detector includes aerogel material. The detector is robust and easily modifiable for a variety of applications and environmental conditions, such as atmospheres of inert gas, hydrogen gas, or mixtures of gases, or in environments that have variable temperature, including high temperatures such as above 100° C. and low temperatures such as below -196° C.

14 Claims, 4 Drawing Sheets

